QUALITY ASSURANCE PROVISIONS // FAT / PLT @ contractors facility

NSN 01-135-8763

P/N.(77445) 2178927

NOMEN .TF-30 Seal

Articles to be furnished hereunder shall be manufactured, tested and inspected in accordance with drawing and all specifications

 (77445) 2178927
 Assembly
 Revision "A"

 (77445) 2178928
 Positioning Ring
 Revision "B"

 (77445) 2178929
 Ring holder
 Revision "B"

(77445) 2178934 Self Locking Bolt Revision "Basic" THIS ITEM IS

"SOURCE CONTROLLED TO:

HI-SHEAR CORPORATION / 2600 SKYPARK DRIVE / TORRANCE,CA. 90509 ITEM IDENT # BB352G-6-9

I. Quality/Inspection Requirements

- A. MIL-I-45208 or ISO 9000 equivalent applies:
- B. First Article Testing applies:
- C. Mandatory Inspection applies: Refer to contract section C.
- D. Production Lot Testing Applies
- E. Site Survey may be required
- F. Pre-Award Survey required

II. Supplemental Requirements

- A. Additionally, para. 3.1-3.5, 5.1-5.2, 6.1-6.2 of MIL-Q-9858 or ISO 9000 equivalent apply.
- B. The contractor shall identify on the process/operation sheets all manufacturing sources performing processes/operations outside of their facilities. These sheets shall not be revised or altered after the successful completion of First Article and/or Production Lot Testing without approval from the Engineering Support Activity (ESA), via the PCO.
- C. The Inspection Method Sheets which list the characteristics of each item produced under the contract shall have serial number traceability to the raw material, casting, or forging. In addition, the contractor is responsible for providing completed inspection method sheets showing the actual dimensions taken
- D. Markings should be in accordance with MIL-STD-130 Rev. "J" paragraph 5.3.3(a), (b),(c), and (g). Method and location shall be in accordance with the drawing.

III. Mandatory Inspection Requirements

During production, mandatory inspection is required to be accomplished by the contractor, as follows:

A. Level of Inspection (LOI):

- 1) Critical Characteristics: 100% inspection shall apply.
- 2) Major and Minor Characteristics LOI shall be in accordance with a sampling plan acceptable to the QAR.

B. Critical Characteristics:

<u>DRAWING 2178928</u>: NOTE 4: -D- COAT PER PWA SPECIFICATION PWA 53-1 / .003-.005 THICK. DIMENSIONS ARE AFTER COATING

SOURCE CONTROL DRAWING: 2178934; SELF LOCKING BOLT

PROCURE FROM HI-SHEAR CORP

MATERIAL PER NOTE 3:

CORE BOLT AISI 431 SST

SLEEVE: AISI 305 SST

EXPANDER: AISI 431 SST

SILVER PLATE

CORE BOLT- MIN SHEAR STRENGTH @ ROOM TEMP 125,000.PSI EXPANDER- MIN SHEAR STRENGTH @ ROOM TEMP 125,000.PSI

C. Major and Minor Characteristics:

1) Shall be defined by the contractor subject to QAR concurrence, unless defined on applicable drawings and associated specifications.

IV. Unless expressly provided for elsewhere in this Clause, equipment such as fixtures, jigs, dies, patterns, templates, mylars, special tooling, test equipment, or any other manufacturing aid required for the manufacture and/or testing of the subject items will not be provided by the Government or any other source and is the sole responsibility of the contractor. The foregoing applies notwithstanding any reference to such equipment or the furnishing thereof that may be contained in any drawing

FIRST ARTICLE TESTS REQUIRED (Government Testing at the contractors facility)

I. First Article Inspection/Test Criteria:

TWO SAMPLES SHALL BE PROVIDED TO THE INSPECTION TEAM: ONE SAMPLE SHALL BE UN-ASSEMBLED SO A DIMENSIONAL INSPECTION MAY BE PERFORMED ON:

(77445) 2178928

Positioning Ring

Revision "B"

(77445) 2178929

Ring holder

Revision "B"

(77445) 2178934

Self Locking Bolt

Revision "Basic"

ONE SAMPLE SHALL BE ASSEMBLED TO ACCOMMODATE FINAL INSPECTION AND A FIT CHECK ON THE ENGINE

The tests to be performed under the First Article approval clause of the contract are:

- A. Dimensional Check 100 % of finished part
- B. Form / Fit
- C. Compliance with all drawings, and specifications referenced therein.
- D. Review documentation as provided under DD 1423 requirements.

In addition to the above tests, the First Articles to be inspected hereunder shall also be subjected to those tests which will demonstrate that the articles comply with contract requirements.

The contractor shall be responsible for providing necessary parts and repair of the First

Article (s) during testing.

The contractor shall be responsible for providing necessary parts and repair of the First Article Sample (s) during testing.

II. Special Instructions:

Sample (s) may be considered as production items under the contract provided the sample(s) can be refurbished to ready for issue (RFI) condition and provided the sample(s) have inspection approval of the cognizant QAR. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.

Notification of Shipment of Material For Government Testing:

A. Fourteen (14) days prior to inspection of First Article Sample (s) the contractor shall notify the designated test facility, in writing of the anticipated inspection date, with an

information copy to the PCO, ACO, and QAR The contractor shall also arrange for preliminary inspection of test samples by the CAO/QAR.

The contractor shall notify the Contracting Officer as well as NAVICP as soon as the First Article Sample is available for dimensional inspection so that these commands can contact the cognizant NADEP

FIRST ARTICLE APPROVAL (GOVERNMENT TESTING @ KTRS PLANT)

A. The contractor shall present two (2) units of lot / item 001 within 200 days from the date of this contract

A TEAM FROM the NADEP QUALITY ASSURANCE, AND E & E, ALONG WITH PERSONNEL FROM NAVICP PHILADELPHIA CODE 0733.3 SHALL WITNESS THE DIMENSIONAL INSPECTION AT THE CONTRACTORS PLANT. A COMPLETE 100% DIMENSIONAL INSPECTION SHALL BE PERFORMED ND ALL MANUFACTURING DOCUMENTATION SHALL BE REVIEWED...

Marking of test sample:

"FOR FIRST ARTICLE TESTING. NOT FOR RFI, DO NOT TAKE UP IN STOCK". CONTRACT NUMBER:

A. For First Article Test, the shipping documentation shall contain this contract number and the lot/item indentification. The characteristics that the First Article must meet and the testing requirements that are specified elsewhere in this contract.

B. If the First Article is disapproved, the contractor, upon Government request, shall submit an additional First Article for testing. After each request, the contractor shall make any necessary changes, modification, or repairs to the First Article or select another First Article for testing. All costs related to these tests are to be borne by the contractor, including any and all costs for additional tests following a disapproval. The contractor shall furnish any additional First Article to the Government under the terms and conditions and within the time specified by the Government.

The government shall act of this First Article within the time limit specified in paragraph" B" above. The government reserves the right to require an equitable

adjustment of the contract price for any extension of the delivery schedule or for any additional costs to the Government related to these tests.

C. If the contractor fails to PROVIDE any First Article on time, or the contracting officer disapproves any First Article, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract.

D. Unless otherwise provided in the contract, and if the approved First Article is not consumed or destroyed in testing, the contractor-

1) May deliver the approved First Article as part of the contract quantity if it

meets all contract requirements for acceptance.

2) Shall remove and dispose of any First Article from the government test facility at the contractor's expense.

E If the Government does not act within the time specified in paragraph B or C above, the contracting officer shall, upon timely written request from the contractor, equitably adjust under the changes clause of this contract the delivery or performance dates and/or the contract price, and any other contractual term affected by the delay.

- F. Before First Article approval, the acquisition of materials or components for, or the commencement of production of, the balance of the contract quantity is at the sole risk of the contractor. Before First Article approval, the costs thereof shall not be allocable to this contract for 1) progress payments, or 2) termination settlements if the contract is terminated for the convenience of the Government.
- G The contractor shall produce both the First Article and the production quantity at the same facility and shall submit a certification to this effect with each First Article.
- H. The contractor shall provide specific written notification to the procuring contractor officer informing him/her of the shipment of any articles furnished in accordance with this clause. Such notification must be addressed to the attention of the ACO with copies to the testing activity. Failure to provide such notification shall excuse the government from any delay in performing First Article Testing and informing the contractor of the results thereof.

PRODUCTION LOT TESTING REQUIREMENTS
[WITNESSED AND ACCEPTED AT THE CONTRACTORS FACILITY]
The material produced under contract shall be accepted by the cognizant CAO/QAR upon the successful completion of these requirements.

THE PRODUCTION LOT INSPECTION SHALL BE PERFORMED AT THE CONTRACTORS FACILITY WITNESSED AND ACCEPTED BY THE DCMA/QAR. A LETTER OF FINDINGS SHALL BE FORWARDED TO THE DEFENSE SUPPLY CENTER PCO.

I. Production Lot Test Requirements

- A. The cognizant CAO/QAR shall select two (2) item (s) at random from the production lot. In addition the QAR shall select one (1) item (s) at random from each successive lot or portion thereof.
- B. Production Lot Testing to be completed during production after First Article Approval.
- C. Sample (s) are to be unpainted. Corrosive areas to be coated with a light preservative.
- II. The tests to be performed under the Production Lot Sample testing provisions of the contract are:
 - A. Compliance with drawings and all specification referenced therein.
 - B. Dimensional Check

In addition to the above tests, the Production Lot Sample(s) to be delivered hereunder shall also be subjected to those tests which will demonstrate that the sample(s) comply with contract requirements.

III. Testing location

A. The Production Lot inspection shall be performed at the contractor's plant, by the contractor and witnessed and accepted by the DCMC/QAR. Within fifteen (15) days of

completion of Production Lot Testing the CAO/QAR shall prepare and submit two (2) copies of their test report with conclusions and recommendations to the Contracting Officer All 1423 requirements apply.

B Sample(s) may be considered as production items under the contract provided sample(s) can be refurbished to ready For Issue (RFI) condition and provided sample(s) have inspection approval of the cognizant DCMC. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.

PRODUCTION LOT TESTING (CONTRACTOR TESTING)

A. If the contractor fails to provide any Production Lot Samples for testing within the time or times specified, or if the contracting officer disapproves any Production Lot Samples, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract, and this contract shall be subject to termination for default.

B. In order for a Production Lot to be acceptable, all samples representative of the lot must pass all the contract requirements. In the event a sample fails to pass such requirements, the lot will be rejected. In such event, the government may, at its option and at no additional cost to the government, (I) terminate all or any portion of this contract for default, (II) require the manufacture of a new Production Lot, or a rework of the rejected Production Lot if the means and procedures by the contractor for rework are acceptable to the government, or (III) require the submission of additional samples for test. The foregoing procedures shall apply to new or reworked Production Lots in the same way as they did to the original Production Lot.

C.For each additional sample or each resubmission of a modified sample which the contractor is required to submit for approval hereunder as a result of a failure of a previous sample to conform to the requirements of the specification, the contractor shall pay to the government the costs of reinspection, examination and retesting and the contractor and his sureties (if any) shall be liable for the amount of such costs.

D.Nothing contained in the foregoing provisions of this clause and no action of the government in accordance herewith, shall in any way prejudice the right of the government under the clause of this contract entitled Default.

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved OMB No. 0704-0188

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FORM 1423-1, AUG 96

NAVICP-P / Hughes

H. DATE

4 May 2002

G. PREPARED BY

PREVIOUS EDITION MAY BE USED

I. APPROVED BY

NAVICP-P / Hughes

Page **Q** of **10**Pages

J. DATE

4 May 2002

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Page 9

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4 May 2002

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J. DATE

*UPON SUBMISSION OF FIRST ARTICLE/PRODUCTION LOT TEST

H.DATE

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4 May 2002

** AT TIME OF CONTRACT COMPLETION

SAMPLE (S)

REPARED BY

ICP-P/Hughes

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